of the pigs; 36.36% (4/11) of the equines. The results permitted the conclusion that the agent is present in the population assessed and in spite of the greater prevalence in dogs (P=0.023) and cats (P=0.022) in the town outskirts, the coefficients are similar to the other regions of Paraná state.

PT 042 STUDY ON THE DEVELOPMENT OF RESISTANCE IN DOGS TO IMMATURE INSTARS OF *AMBLYOMMA CAJENNENSE* TICKS (ACARI: IXODIDADE).

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The scope of this investigation was to study the possible acquisition of immunity in domestic dogs to larvae and nymphs of the lone star tick *A. cajennense* by determining the tick alimentary performance and other biological parameters after both successive and challenge infestations post vaccination with unfed nymphal extract. Results showed no statistical difference between either the successive or the challenge infestations and the control ones.
Tick-bite lesions revealed epidermal hyperplasia and a typical inflammatory response with a marked influx of cells, mainly neutrophils, during all the infestations. A deep cementum cone and alimentary cavity were present in several sections. The skin reaction to intradermal inoculation of either unfed larval or nymphal extract showed an immediate type reaction in dogs preinfested with nymphs and both immediate and delayed type reactions in dogs preinfested with larvae.
The immunoblotting displayed common antigens recognized by sera from dogs immunised with homogenates of either salivary glands or immature tick stages. Indirect immunohistochemistry of unfed tick sections showed labelling of salivary gland acini types II and III in all tick instars.
It seems that dogs do not develop a marked resistance to larvae and nymphae of the lone star tick *Amblyomma cajennense.*

PT 043 PERFORMANCE OF SEROLOGICAL TESTS FOR *TRYPANOSOMA EVANSI* IN EXPERIMENTALLY INOCULATED GATS

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Trypanosoma evansi was diagnosed for the first time in the Canary Islands (Spain) in 1997 in a dromedary camel presenting the chronic and terminal stage of the disease. The animal had been imported from the neighbouring West African area, where *T. evansi* is highly prevalent. Seroprevalences of 4.8% up to 9% were observed in camels on the Canary Islands between 1997 and 1999. Affected animals were treated but dissemination of the disease in other hosts is not excluded. Particularly goats could play an important role in the epidemiology of *T. evansi* in the Canary Islands. Thus, the objective of this work was to assess the performance of simple and rapid serological antibody tests in experimentally inoculated goats. Five adult Canary female goats were inoculated intravenously with, at least, 1 x 10^5 *T. evansi* isolated from a dromedary camel. The animals were kept for 8 months and monthly checked for the presence of the parasite and of specific antibodies. The serological tests investigated were the direct card agglutination test CATT/*T. evansi* and the indirect card agglutination test LATEX/*T. evansi*, both developed at the Institute of Tropical Medicine, Antwerpen, Belgium. For parasite detection, stained blood smears, buffy coat examination, lymph node aspirate and inoculation in mice were performed. Other indirect parameters of the disease such as packed cell volume (PCV) and serum total proteins were also determined. The inoculated goats showed a subclinical course of the disease and only a few episodes of fever (within the first weeks post inoculation -PI-) and arthritis (6 months PI) were evident. Parasitemia remained very low but was persistent. Drops in PCV (mean values: 29.5% before inoculation (BI), 20% at 4 months PI, 26% at 8 months PI), and total serum protein (mean values: 6.3 g/dL -BI-, 11.2 g/dL at 4 months PI, 8.6 g/dL at 8 months PI) were observed. All animals became positive in the CATT/*T. evansi* after one month PI and remained positive with minimum end-titer of 1/4. Similar results were obtained with the LATEX/*T.evansi* although at lower end-titers (1/2). We conclude that CATT/*T. evansi* is adequate for assessing infection of Canarian goats by *T. Evansi.*